A Guide to Recycling Plastics



Confused about what can and can't be recycled...and why? You're not alone! This detailed information sheet explains the rules of plastics recycling in Frederick County with basic information on the manufacturing and recycling processes.



There are many types of plastic used in manufacturing; different types are suited for different product applications. This means that our homes are filled with a wide variety of plastic products—many of which are recyclable, but not all. The plastics industry has developed identification codes to label different kinds of plastic. The identification system divides plastic into seven distinct categories and uses number codes which can generally be found on the bottom of containers. (More information on plastic types and their uses can be found in the chart on the other side of this page.) Examples of identification codes are:

However, just because an item has a recycling symbol doesn't mean it's recyclable everywhere. There has to be a market to take the item, so referring to the symbol as an indicator of local recyclability isn't a good idea. Complicating matters is the fact that two different plastic products marked with the same resin ID numbers may not both be recyclable! For example, PET (Polyethylene Terephthalate), shown with the #1 symbol, is used in a wide variety of packaging applications from bottles to egg cartons to disposable cups. Although the base material is PET, manufacturers can alter the composition of the plastic depending on its designed end-use. The result is that not all PET products can be mixed together for recycling, as there can be variations in viscosity levels or they may contain chlorine and/or be coated with silicone or glycol. Also, the way the products are formed (blown or injection molded) affects their recyclability, even if it's all made of PET.

So what does this mean for you? Frederick County uses a single stream recycling system, which means residents do not have to sort recyclables at home, including all the different kinds of plastic. All you need to know is what should and should not go in your cart. **There are five simple rules regarding plastic recycling:**

- 1. No thin, brittle plastics. This includes "clamshell" containers (clear, hinged containers for produce, baked goods or takeout containers) as well as thin, disposable plates and drinking cups.
- **2.** *Only* **plastic bags imprinted with a code of #2 or #4 are accepted for recycling.** Trash bags are not recyclable. All *recyclable* bags should be gathered together inside one bag, not recycled loose/singly.
- **3.** *No* **expanded polystyrene (Styrofoam™)!** When possible avoid buying products with this packaging—and ask retailers, restaurants and manufacturers to use readily-available alternative materials.
- **4. No microwaveable plastics.** These materials have been treated to be heat-resistant and therefore do not melt well or recombine with other plastics during the recycling process.
- **5. Plastics without an identification code imprinted on them are generally not recyclable.** (The other side of this page has more information on plastic types and identification codes.) No code, no recycling!

In addition to these rules, remember that **all containers must be empty!** They do not have to be spotlessly clean, however, partially full containers will be rejected from the recycling process and become trash. Also, **no plastic items that are too large** to fit in a standard-sized recycling cart are accepted for *curbside* recycling. These items (such as lawn chairs, picnic coolers and outdoor toys) <u>can</u> be brought to the Bulky Plastics Drop Off site at the Reichs Ford Road recycling facilities (9031 Reichs Ford Road in Frederick.) And, lastly, **when in doubt, throw it out!** Non-recyclable trash reduces the value of recyclable items and can contaminate the re-manufacturing process.

After your recyclables are collected curbside they are delivered to a materials recovery facility where they are sorted by material type in order to be recycled. You can help keep the costs of collection, sorting and reprocessing down and keep the value of plastics high by collecting only those materials that are currently accepted for recycling. (The chart on the other side of this page shows how plastics are used in recycling and manufacturing processes.)

If you have any questions about what can be recycled or about the recycling program, please call the Frederick County Office of Recycling at 301-600-2960, or visit www.LearnMoreRecycleBetter.org.

| Type of Plastic | Examples of What is Accepted for Recycling | It Gets Made Into | Examples of What is NOT Accepted for Recycling |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PET polyethylene terephalate It's tough and shatterproof. | Peanut butter jars. Narrow-neck containers, such as for detergents, mouth wash, salad dressing, vitamins, soda and water bottles. | Bottles, carpeting, tennis balls, insulation for jackets, t-shirts, paint brushes. | Thin, brittle plastics and "clamshell" packaging—often used to hold items such as strawberries, baked goods such as muffins, or salad bar meal containers. |
| HDPE high density polyethylene It's flexible and often translucent. | Milk and water jugs, juice bottles, dairy tubs such as whipped topping or sour cream, liquid detergent bottles, medicine bottles, kitty litter jugs, plastic grocery bags. | Plastic lumber, detergent and bleach bottles, trash cans, buckets, toys, traffic barriers, fly swatters. | Materials made from Tyvek, such as mailing envelopes and protective gear. |
| PVC polyvinyl chloride It's tough and chemical resistant. | Bottles for shampoo, cooking oil, salad dressing. | Floor mats, mud flaps, pipes, hoses, computer and electric cord wraps. | PVC pipes, house siding, or objects too large to fit in a recycling cart. |
| LDPE low density polyethylene It's flexible and tough. | Food storage containers, dairy container lids, bags newspapers are delivered in, dry cleaning bags. | Garbage can liners, frisbees, plastic lumber, lawn furniture, toys. | Pliable, foam-like packing materials. Bags without a plastic identification number printed on them. |
| PP polypropylene It's chemical and heat resistant. | Medicine bottles, deli containers, yogurt containers, rigid/reuseable plastic cups, nursery plant packs and flower pots. | Brooms, lawn mower wheels, ice scrapers, paint buckets, toothbrushes. Spun fiber for carpeting, fabrics and filling for coats, sleeping bags and blankets. | Thin, brittle #5 plastics, such as disposable plates, drinking cups or takeout containers. Polypropylene fabrics. |
| PS polystyrene It's brittle and see-through OR soft opaque foam. | Dairy containers, medicine and vitamin bottles, flower pots and nursery plant packs. | Building insulation, flower pots, CD cases and sleeves, rulers, trash cans, food service trays. | Clear, brittle containers and cups. Disposable foam hot/cold beverage cups, carry-out containers, foam egg cartons, disposable plates, packing peanuts, anything "styrofoam". |
| OTHER other plastics | Bottles such as for ketchup, syrup, window cleaner, or 5-gallon water coolers. | Street signs, playground equipment, pens, concrete supports, ice scrapers. | Items marked "compostable" or "biodegradeable". Objects too large to fit in a recycling cart, and in general, objects without an identification code imprinted on them. |